## AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An outlet nozzle ~~(10)~~ for use in a liquid fuel rocket engine comprising:

a nozzle body having an axis ~~(11)~~ of revolution and a cross section which varies in diameter along said axis, said body having a wall structure comprising a plurality of mutually adjacent cooling channels ~~(12)~~ helically extending substantially in parallel from the inlet end ~~(13)~~ of the nozzle to its outlet end ~~(14)~~; and

the nozzle ~~(10)~~ further comprising at least two longitudinally arranged sections ~~(10a, 10b)~~ and a shift between a positive and a negative channel angle in the transition from one section to an adjacent section.

2. (Currently Amended) The outlet nozzle as recited in claim 1, further comprising:

different angles of the cooling channels ~~(12)~~ in the nozzle sections ~~(10a, 10b)~~ being adapted to quench reaction forces originating from exhausts flowing past said channels.

3. (Currently Amended) The outlet nozzle as recited in claim 1, further comprising:

each cooling channel ~~(12)~~ extending helically with respect to the longitudinal axis ~~(11)~~ of the nozzle ~~(10)~~.

4. (Currently Amended) The outlet nozzle as recited in claim 1, further comprising:

the channels in each section ~~(10a, 10b)~~ having a constant cross section along their length.

5. (Currently Amended) The outlet nozzle as recited in claim 1, further comprising:

the cross sectional area of the channels ~~(12)~~ of two adjacent nozzle sections ~~(10a, 10b)~~ being different.

6. (Original) The outlet nozzle as recited in claim 1, further comprising:

the channel cross sectional area being larger for a downstream nozzle section than for an upstream nozzle section.

7. (Currently Amended) The outlet nozzle as recited in claim 1, further comprising:

the channels ~~(12)~~ having a rectangular cross section.

8. (Currently Amended) A method for manufacturing an outlet nozzle ~~(10)~~ for use in a liquid fuel rocket engine, said nozzle forming a body of revolution having an axis ~~(11)~~ of revolution and a cross section which varies in diameter along said axis, and having a wall structure comprising a plurality of mutually adjacent cooling channels ~~(12)~~, helically extending substantially in parallel from the inlet end ~~(13)~~ of the nozzle to its outlet end ~~(14)~~, said method comprising:

joining a plurality of the tubular channels ~~(12)~~ to form a first section ~~(10a)~~ of the outlet nozzle ~~(10)~~ in which the channels has an angle of helix in relation to the longitudinal axis ~~(11)~~ of the ~~nozzle;~~ nozzle; and

joining a plurality of tubular channels ~~(12)~~ to form a second section ~~(10b)~~ of the outlet nozzle ~~(10)~~ in which the channels have opposite angles of helix in relation to the longitudinal axis of the nozzle, and

joining said sections ~~(10a, 10b)~~ to form a composite outlet nozzle ~~(10)~~ having continuous cooling channels ~~(12)~~.

9. (Currently Amended) The method as recited in claim 8, further comprising:

said joining is realized by means of laser welding and the tubular channels ~~(12)~~ are joined by welding at the outside of the nozzle.

10. (Currently Amended) The method as recited in claim 8, further comprising:

forming the tubular channels ~~(12)~~ by means of tubes having a rectangular cross section.

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Applicant: HÄGGANDER, Jan
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11. (Currently Amended) The method as recited in claim 8, further comprising:

providing the meeting edges of sections to be joined with notches ~~(15)~~ at the outside to enable welding the remote part of the tubular channels from the outside of the nozzle ~~(10)~~.

12. (Currently Amended) The method as recited in claim 11, further comprising:

applying a ring shaped element ~~(16)~~ to bridge the notch area, and welding said element to the meeting channel ends.